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| 10/523,441 | 05/05/2005 | Sergio Pianczzola | Z01-153 | 3852 |

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| EXAMINER |
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OLSON, LARS A

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| ART UNIT | PAPER NUMBER |
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3617

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08/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/523,441

Applicant(s)

PIANEZZOLA ET AL.

Examiner

Lars A. Olson

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 11-17 is/are rejected.
- 7) ☒ Claim(s) 5-10 and 18-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

1. A response was received from the applicant on July 16, 2007.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buckle (US 4,009,583).

Buckle discloses a buoyancy compensator device, as shown in Figures 1-6, that is comprised of an air chamber, defined as Part #8, and at least two outlets, defined as Parts #8b and 18 in Figure 6, where one of said outlets is arranged in an upper region and the other arranged in a lower region, as shown in Figure 6, and where a manifold, as shown in Figure 6, connects said air chamber to said outlets by means of a control valve, defined as Part #29, with a pushbutton control, defined as Part #27. The opening of said control valve enables gas to pass from said air chamber into said manifold, and from said manifold through at least one of said outlets, depending upon the orientation of said buoyancy compensator device, as described in lines 21-44 of column 4.

Buckle, as set forth above, discloses all of the features claimed except for the specific use of an expandable air chamber.

The use of an expandable air chamber in combination with a buoyancy compensator device is known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize an expandable air chamber in combination with the buoyancy compensator device as disclosed by Buckle for the purpose of providing a buoyancy compensator device with an air chamber that is smaller and lighter in weight.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buckle in view of Garofalo (EP 1136351 A2).

Buckle, as set forth above, discloses all of the features claimed except for the use of an outlet in the form of a one-way membrane.

Garofalo discloses a buoyancy compensator device, as shown in Figure 1, that is comprised of an expandable air chamber, defined as Part #1, and at least two outlets, defined as Parts #3-5, one of said outlets being located in an upper region, defined as Part #3, and another of said outlets being located in a lower region, defined as Part #4, where each of said outlets constitute a one-way membrane, as described in lines 41-52 of column 2. A manifold, which is defined as Part #6, is comprised of tubular elements that can be located either outside or within said air chamber, as described in lines 17-18 of column 2. Said air chamber can also be filled with a mixture of breathable gas that is contained in a gas mix reserve, defined as Part #2, by a mechanical inflator, defined as Part #12, that is operated by a pushbutton inflation control, defined as Part #11.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize one-way membrane outlets in combination with an

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expandable air chamber, as taught by Garofalo, in combination with the buoyancy compensator device as disclosed by Buckle for the purpose of providing a buoyancy compensator device with outlets that do not rely upon a spring force to remain closed.

5. Claims 3, 4, 11-14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buckle in view of Garofalo, and further in view of Garofalo et al. (US 6,217,257).

Buckle in combination with the teachings of Garofalo shows all of the features as claimed except for the use of an air chamber in the form of a vest with two shoulder straps and a lower band.

Garofalo et al. discloses a balancing jacket or vest, as shown in Figure 1, that includes an expandable air chamber, defined as Part #1, that is in the form of a vest, and a plurality of outlets, defined as Parts #2-5, where said vest is further comprised of a pair of shoulder straps and a lower band that passes around the hips of a wearer, as shown in Figure 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize an air chamber in the form of a vest with two shoulder straps and a lower band, as taught by Garofalo et al., in combination with the buoyancy compensator device as disclosed by Buckle and the teachings of Garofalo for the purpose of providing a buoyancy compensator device that facilitates use around the torso of a person.

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buckle in view of Garofalo et al.

Buckle, as set forth above, discloses all of the features claimed except for the use of an air chamber in the form of a vest with two shoulder straps and a lower band.

Garofalo et al. discloses a balancing jacket or vest, as shown in Figure 1, that includes an expandable air chamber, defined as Part #1, that is in the form of a vest, and a plurality of outlets, defined as Parts #2-5, where said vest is further comprised of a pair of shoulder straps and a lower band that passes around the hips of a wearer, as shown in Figure 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize an air chamber in the form of a vest with two shoulder straps and a lower band, as taught by Garofalo et al., in combination with the buoyancy compensator device as disclosed by Buckle for the purpose of providing a buoyancy compensator device that facilitates use around the torso of a person.

Allowable Subject Matter

7. Claims 5-10 and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments filed on July 16, 2007 regarding claims 1-4 and 11-17 have been fully considered but they are not persuasive.

9. The applicant argues that Buckle (US 4,009,583) does not disclose all of the features claimed, or function in the same manner as the buoyancy compensator claimed by the applicant.

10. In response to the applicant's argument, Buckle discloses a buoyancy compensator that is comprised of an air chamber (8), and at least two outlets (8b, 18), one of said outlets being arranged in an upper region of said buoyancy compensator, and another of said outlets being arranged in a lower region of said buoyancy compensator, where a manifold connects said air chamber to said outlets, as is clearly shown in Figure 6, by means of a control valve (29) having a pushbutton control (27). Said control valve allows gas to pass from said air chamber into said manifold, and then from said manifold through one of said outlets depending on orientation. Buckle, however, does not show the use of an expandable air chamber. Thus, the examiner has indicated that the use of expandable air chambers made from a flexible material is known in the art. In combination with a known expandable air chamber, Buckle discloses all of the features as claimed. Therefore, the rejection of claims 1-4 and 11-17 is deemed proper and is not withdrawn.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication from the examiner should be directed to Exr. Lars Olson whose telephone number is (571) 272-6685.

lo

August 24, 2007

LARS A. OLSON
PRIMARY EXAMINER

Lars Olson
8/24/07